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PATENT COOPERATION TREATY

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference J3747 (C)	FOR FURTHER ACTION	See item 4 below		
International application No. PCT/EP2005/001454	International filing date (day/month/year) 10 February 2005 (10.02.2005)	Priority date (day/month/year) 17 March 2004 (17.03.2004)		
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237				
Applicant UNILEVER PLC				

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).			
2.	This REPORT consists of a total of 6 sheets, including this cover sheet.			
	In the attached sheets, any referent to the international preliminary re	nce to the written opinion of to port on patentability (Chapte	he International Searching Authority should be read as a reference r I) instead.	
3.	This report contains indications relating to the following items:			
	Box No. I	Basis of the report		
	Box No. II	Priority	•	
ı	Box No. III	Non-establishment of opin applicability	ion with regard to novelty, inventive step and industrial	
	Box No. IV	Lack of unity of invention		
	Box No. V	Reasoned statement under applicability; citations and	Article 35(2) with regard to novelty, inventive step or industrial explanations supporting such statement	
	Box No. VI	Certain documents cited		
	Box No. VII	Certain defects in the inter-	national application	
	Box No. VIII	Certain observations on the	e international application	
4.	4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44his.3(c) and 93his.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44his.2).			
		-		
	Date of issuance of this report 19 September 2006 (19.09.2006)			
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland		mbettes	Authorized officer Agnes Wittmann-Regis	
Facsimile No. +41 22 338 82 70			e-mail: pt06@wipo.int	

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

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	see form PCT/ISA/220			AL SEAROTHING AS THE	
			(F	PCT Rule 43bis.1)	
			Date of mailing (day/month/year) see	e form PCT/ISA/210 (second sheet)	
Applicant's or agent's file reference see form PCT/ISA/220 International application No. International filing date PCT/EP2005/001454 10.02.2005			FOR FURTHER ACTION See paragraph 2 below		
			y/month/year)	Priority date (day/month/year) 17.03.2004	
nterr	national Patent Classification (IPC) or K7/08	ooth national classification ar	nd IPC		
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INL	LEVER PLC				
	☐ Box No. IV Lack of unity of Reasoned state applicability; of	ment of opinion with rega of invention tement under Rule 43 <i>bis</i> itations and explanations	1/a)(i) with regard to	rive step and industrial applicability o novelty, inventive step or industrial atement	
	☐ Box No. VI Certain docur ☐ Box No. VII Certain defec	ts in the international app	lication		
	☐ Box No. VIII Certain obser	vations on the internation	al application		
	EURTHER ACTION	*	•		
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European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465

Szarek, S

Telephone No. +49 89 2399-8219



WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/EP2005/001454

	Box No	
1.	the lang	pard to the language , this opinion has been established on the basis of the international application in suage in which it was filed, unless otherwise indicated under this item.
	☐ Th	s opinion has been established on the basis of a translation from the original language into the following guage , which is the language of a translation furnished for the purposes of international search der Rules 12.3 and 23.1(b)).
2.	With re	gard to any nucleotide and/or amino acid sequence disclosed in the international application and ary to the claimed invention, this opinion has been established on the basis of:
	a. type	of material:
		a sequence listing
		table(s) related to the sequence listing
	b. forn	at of material:
		in written format
		in computer readable form
	c. time	of filing/furnishing:
		contained in the international application as filed.
		filed together with the international application in computer readable form.
	. 🗅	furnished subsequently to this Authority for the purposes of search.
;	t	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto as been filed or furnished, the required statements that the information in the subsequent or additional opies is identical to that in the application as filed or does not go beyond the application as filed, as oppropriate, were furnished.
	4. Addit	onal comments:

Box No. V Reasoned statement under Rule 43bls.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-11

No:

Claims

Inventive step (IS)

Yes: Claims

1-11

Claims No:

Industrial applicability (IA)

Yes: Claims

1-11

Claims No:

2. Citations and explanations

see separate sheet

PCT/EP2005/001454

Re Item V.

Reference is made to the following documents:

D1: WO 03/060046 D2: EP 0 234 475

1. The subject-matter of claims 1 to 11 is new and involves an inventive step according to Article 33(2) et 33 (3) PCT.

1.1 Novelty

Claim 1 is directed to aqueous hair conditioning compositions comprising:

- (a) a mono (C14-C22)-alkyl trimethylammonium surfactant (cetrimonium),
- (b) a di-(C20-C24)alkyl imidazoline quaternary surfactant and
- (c) a mono-(C12-C22)-alkyl hydroxyethyl dimethylammonium surfactant (hydroxyethyl cetyldimonium phosphate).

None of the cited document discloses a composition comprising (a) + (b) + (c). WO 03060046 discloses hair conditioning compositions comprising (a) and (b). The combination of (a) and (b) provides enhanced performance in hair conditioning. EP 0234475 discloses hair conditioning compositions containing (c). The component (c) is used as both conditioning agent and foaming agent in an amount of from 0.6 % to 5 %.

The subject-matter of claims 1-11 is therefore new.

1.2 Inventive step

WO 03060046 is considered as the closest prior art. This document discloses hair conditioning compositions comprising (a) and (b). The combination of (a) and (b) provides enhanced performance in hair conditioning.

The missing technical feature is the component (c). The comparative examples (page 26) show that the presence of (c) provides a better conditioning and feel.

EP 0234475 discloses hair conditioning compositions containing (c). The component

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/EP2005/001454

(c) is used as as both conditioning agent and foaming agent. The document also teaches that the hydroxyethyl cetyldimonium phosphate (c) replaces the standard quaternary ammonium chloride conditioning agents (like (a) and (b)), but small amounts of (a) or (b) (less than 0,5 %) may be retained.

However, this document also teaches that the amount of (c) to be used is from 0,6% to 5%.

Therefore it would not have been obvious for the man skilled in art to arrive at the claimed composition comprising from 0,0001 to 0,5 % of (c).

The subject-matter of claims 1 to 11 involves an inventive step.

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PATENT COOPERATION TREATY

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pplicant			· .	
INILEVER PLC			·	
☐ Box No. III ☐ Box No. IV ☐ Box No. V ☐ Box No. V ☐ Box No. V ☐ Box No. V	Lack of unity Reasoned sta applicability; Certain docui	of Invention atement under Rule 438 citations and explanatio	bis.1(a)(i) with regard to such stopporting such stopporting such stoppication	itive step and industrial applicability to novelty, inventive step or industrial tatement
2. FURTHER AC	CTION			• •
written opinion the applicant International I will not be so	n of the Internation chooses an Author Bureau under Rul considered.	ority other than this one le 66.1 <i>bis</i> (b) that writted	to be the IPEA and to n opinions of this Inter a written opinion of the	will usually be considered to be a). However, this does not apply where he chosen IPEA has notifed the rnational Searching Authority ne IPEA, the applicant is invited to ments, before the expiration of three
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Name and mailing address of the ISA:



European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/EP2005/001454

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		in computer readable form
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see separate sheet

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